

# **The Economic Club of New York**

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101st Year

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400<sup>th</sup> Meeting

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**Hilton New York**  
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**Program**

**GUEST OF HONOR**

**THE HONORABLE**

**BEN S. BERNANKE**

*Chairman, Federal Reserve System*

**PRESIDING OFFICER**

**R. Glenn Hubbard**

*Chairman of the Club*

**QUESTIONERS**

**Martin Feldstein**

*Professor of Economics*

*Harvard University*

**Henry Kaufman**

*Treasurer, The Economic Club of New York*

*President, Henry Kaufman & Company, Inc.*

GLENN HUBBARD: Good afternoon, I'm Glenn Hubbard, the Chairman of the Economic Club of New York. It's my pleasure to invite all of you to enjoy in today and to welcome you to this 400<sup>th</sup> meeting of the Economic Club of New York. The club is one hundred and one years old. We believe it is the nation's leading non-partisan forum for any discussion related to economics and to finance. Over the past century about a thousand speakers have appeared before audiences like this and have established a great tradition of excellence. You can see a list of speakers in your program. Also in your program you can see a list of members of the Centennial Society, men and women who have stepped up to insure the club's long term financial footing and viability. Thank them for their generosity.

Especially at this time, as we would be at any time, we're honored today to hear from Ben Bernanke who is the fourteenth Chairman of the Board of Governors of the Federal Reserve System. Chairman Bernanke was sworn in in February 2006. I'm pleased to say that since that time he's addressed the club three times. In fact, he addressed us exactly one year ago today. These times call for someone like Chairman Bernanke. His own scholarship as a distinguished academic has centered very much on credit market problems of the sort we face today. He has given those of us who write text books the opportunity to change every week what we do, and so those updates I suppose are very valuable.

Chairman Bernanke, of course, also chairs the Fed's Open Market Committee. He has also served as the Chairman of the President's Council of Economic Advisors and a member of the Board of Governors of the Fed. He's also been a very distinguished economist throughout his career in academic life at Princeton. He has taken what, of course, is obvious as a central role in

dealing with the global financial crisis. We're all very pleased he's taken the time to address us today. Chairman Bernanke welcome to New York we look forward to your remarks. The floor is yours.

BEN BERNANKE: Thank you Glenn. Glenn and I go way back in academia and elsewhere and in Washington as well. Good afternoon, I'm pleased, once again, to share a meal and some thoughts with the Economic Club of New York. I'm going to focus today on the economic and financial challenges we face and why I believe we are well positioned to move forward.

The problems now evident in the economy and the markets are large and complex. But in my judgment our government now has the tools it needs to confront and to solve them. Our strategy will continue to evolve and be refined as we adapt to new developments and some inevitable set backs. But we will not stand down until we have achieved our goals of repairing and reforming our financial system and restoring prosperity.

The crisis we face in the financial markets has many novel aspects largely arising from the complexity and sophistication of today's financial institutions and instruments, and a remarkable degree of global financial integration that allows financial shocks to be transmitted around the world at the speed of light. However, as a long time student of banking and financial crisis I can also attest that the current situation has much in common with past experiences. As in all past crises, at the root of the problem is a loss of confidence by investors and the public in the strength of key financial institutions and markets. The crisis will end when comprehensive responses by political and financial leaders restore that trust bringing investors back into the

market and allowing the normal business of extending credit to households and businesses to resume.

In that regard we are, in one respect at least, better off than those who dealt with earlier financial crises. Generally during past crises broad based government engagement came late, usually at a point at which most financial institutions were insolvent or nearly so. Waiting too long to respond has usually led to much greater direct cost of the intervention itself and more importantly magnified the painful effects of financial turmoil at households and businesses. That is not the situation we face today.

Fortunately, the Congress and the Administration have acted at a time when the great majority of financial institutions, though stressed by highly volatile and difficult market conditions, remain strong and capable of fulfilling their function of providing credit to our economy. The prompt and decisive actions by our political leaders will allow us to restore more normal market functioning much more quickly and at a lower ultimate cost than would have otherwise been the case. Moreover, we are seeing not just a national response, but a global response to the crisis commensurate with its global nature.

The financial crisis has been with us now for more than a year. It was sparked by the end of the U.S. housing boom, which revealed the weaknesses and accesses that had occurred in subprime mortgage lending. However, as subsequent events have demonstrated the problem was much broader than subprime lending. Large inflows of capital into the United States and other countries stimulated a reaching for yield and under pricing of risk, excessive leverage and the

development of complex and opaque financial instruments that seemed to work well during the credit boom, but have been shown to be fragile under stress. The unwinding of these developments, including a sharp de-leveraging and a headlong retreat from credit risk led to highly strained conditions in financial markets and a tightening of credit that has hamstrung economic growth.

The Federal Reserve responded to these developments in two broad ways. First, following the classic tenets of central banking, the Fed has provided large amounts of liquidity to the financial system to cushion the effects of tight conditions and short term funding markets. Second, to reduce the downside risk to growth emanating from the tightening of credit the Fed, in a series of moves that began last September, has significantly lowered its target federal funds rate. Indeed, last week, in an unprecedented joint action with five other major central banks and in response to the adverse implications of the crisis for the economic outlook, the Federal Reserve, again, eased the stance of monetary policy. We will continue to use all the tools at our disposal to improve market functioning and liquidity, to reduce pressures in key credit and funding markets and to complement the steps that treasury and foreign governments will be taking to strengthen the financial system.

Notwithstanding our efforts and those of other policy makers, the financial crisis intensified over the summer as mortgage related assets deteriorated further, economic growth slowed and uncertainty about the financial and economic outlook increased. As investors lost confidence in the ability of certain firms to meet their obligations their access to capital markets as well as the short term funding markets became increasingly impaired and their stock prices fell sharply.

Prominent companies that experienced this dynamic most acutely included the government sponsored enterprises Fannie Mae and Freddie Mac, the investment bank Lehman Brothers and the insurance company AIG. The Federal Reserve believes that whenever possible the difficulties experienced by firms in financial distress should be addressed through private sector arrangements. For example, by raising new equity capital as many firms have done, by negotiations leading to an acquisition or a merger or by an orderly wind down. Government assistance should be provided with only the greatest reluctance and only when the stability of the financial system, and thus, the health of the broader economy is at risk. In those cases when financial stability is broadly threatened, however, intervention to protect the public interest is not only justified by must be taken forcefully and without hesitation.

Fannie Mae and Freddie Mac present cases in point. To avoid unacceptably large dislocations in mortgage markets, the financial sector and the economy as a whole, the Federal Housing Finance Agency put Fannie and Freddie into conservatorship, and the Treasury, drawing on the authorities recently granted by the Congress, made financial support available. The government's actions appear to have stabilized the GSEs although like virtually all other firms they are experiencing effects of the current crisis. We've already seen benefits of their stabilization in the form of lower mortgage rates, which will help the housing market.

The difficulties at Lehman and AIG raise different issues. Like the GSEs both companies were large, complex and deeply imbedded in our financial system. In both cases the Treasury and the Federal Reserve sought private sector solutions, but none was forthcoming. A public sector

solution for Lehman proved infeasible as the firm could not post sufficient collateral to provide reasonable assurance that a loan from the Federal Reserve would be repaid and the Treasury did not have the authority to absorb billions of dollars of expected losses to facilitate Lehman's acquisition by another firm. Consequently, little could be done except to attempt to ameliorate the effects of Lehman's failure on the financial system.

Importantly, the Financial Rescue Legislation, which I will discuss later, will give us better choices. In the future the Treasury will have greater resources available to prevent the failure of a financial institution when such a failure would pose unacceptable risks to the financial system as a whole. The Federal Reserve will work closely and actively with the Treasury and other authorities to minimize systemic risk.

In the case of AIG, the Federal Reserve and the Treasury judged that a disorderly failure would have severely threatened global financial stability and the performance of the U.S. economy. We also judged that emergency Federal Reserve credit to AIG would be adequately secured by AIG's assets. To protect U.S. tax payers and to mitigate the possibility that lending to AIG would encourage inappropriate risk taking in the future by that company or others the Federal Reserve insured that the terms of the credit extended to AIG imposed significant costs and constraints on the firm's owners, managers and creditors.

AIG's difficulties and Lehman's failure, along with growing concerns about the U.S. economy and other economies, contributed to extraordinarily turbulent conditions in global financial markets in recent weeks. Equity prices fell sharply. Withdrawals from prime money market

mutual funds led them to reduce their holdings of commercial paper, an important source of financing for the nation's non-financial businesses as well as for many financial firms. The cost of short term credit, where such credit was available, jumped for virtually all firms and liquidity dried up in many markets. By restricting flows of credit to households, businesses and to state and local governments the turmoil in financial markets and the funding pressures on financial firms pose a significant threat to economic growth.

The Treasury and the Fed have taken a range of actions to address financial problems. To address illiquidity and impaired functioning in commercial paper markets, the Treasury implemented a temporary guarantee program for balances held in money market mutual funds to help them stem the outflows from those funds. The Federal Reserve put in place a temporary lending facility that provides funding for banks to purchase high quality asset backed commercial paper for money market funds, thus reducing their need to sell commercial paper into already distressed markets. Moreover, we will soon implement a new temporary commercial paper funding facility that will provide a back stop to the commercial paper markets by purchasing highly rated commercial paper directly from issuers at a term of three months when those markets are illiquid.

To address ongoing problems in inter-bank funding markets the Federal Reserve has significantly increased the quantity of term funds it auctions to banks and accommodated heightened demands for temporary funding from banks and primary dealers. Also, to try to mitigate dollar funding pressures worldwide we have greatly expanded reciprocal currency arrangements, or so called swap agreements, with other central banks. Indeed, this week we

agreed to extend unlimited dollar funding to the European Central Bank, the Bank of England, the Bank of Japan and the Swiss National Bank. These agreements enable foreign central banks to provide dollars to financial institutions in their jurisdictions, which helps improve the functioning of dollar funding markets globally and relieve pressure on U.S. funding markets. It bears noting that these arrangements carry no risk to the U.S. tax payer as our loans are to the foreign central banks themselves who take responsibility for the extension of dollar credit within their own jurisdictions.

The expansion of Federal Reserve lending is helping financial firms cope with reduced access to their usual sources of funding, and thus is supporting their lending to non-financial firms and households. Nonetheless, the intensification of the financial crisis over the past month or so made clear that a more powerful comprehensive approach involving the fiscal authorities was needed to address these problems more effectively.

On that basis the administration, with the support of the Federal Reserve, asked the Congress for a new program aimed at stabilizing our financial markets. The resulting legislation, the Emergency Economic Stabilization Act, provides important new tools for addressing the distress in financial markets, and thus mitigating the risks to our economy. The Act allows Treasury to buy troubled assets, to provide guarantees and to inject capital to strengthen the balance sheets of financial institutions. The Act also raises the limit on deposit insurance from a hundred thousand dollars to two hundred and fifty thousand dollars per account effective immediately.

The Troubled Asset Relief Program or TARP authorized by the legislation will allow the Treasury, under the supervision of an oversight board that I will head, to undertake two highly complementary activities. First, the Treasury will use the TARP funds to help recapitalize our banking system by purchasing non-voting equity in financial institutions. Details of this program were announced yesterday. Initially the Treasury will dedicate two hundred and fifty billion dollars toward purchases of preferred shares in banks and thrifts of all sizes. The program is voluntary and designed both to encourage participation by healthy institutions and to make it attractive for private capital to come in along with the public capital. We look to strong institutions to participate in this capital program because today even strong institutions are reluctant to expand their balance sheets to extend credit. With fresh capital that constraint will be eased. The terms offered under the TARP include the acquisition by the Treasury of warrants to insure that taxpayers receive a share of the upside as the financial system recovers. Moreover, as required by the legislation, institutions that receive capital will have to meet certain standards regarding executive compensation practices.

Second, the Treasury will use some of the resources provided under the bill to purchase troubled assets from banks and other financial institutions in most cases using market based mechanisms. Mortgage related assets, including mortgage backed securities and whole loans, will be the focus of the program, although the law permits flexibility in the types of assets purchased as needed to promote financial stability. Removing these assets from private balance sheets should increase liquidity and promote price discovery in these markets, thereby reducing investor uncertainty about the current value and prospects of financial institutions.

Unclogging the markets for mortgage related assets should put banks and other financial institutions in a better position to raise capital from the private sector and to increase the willingness of counter parties to engage. With time the provision of equity capital to the banking system and the purchase of troubled assets will help credit flow more freely, thus supporting economic growth. These measures will lead to a much stronger financial system over time, but steps are also necessary to address the immediate problem of lack of trust and confidence.

Accordingly, also announced yesterday was a plan by the Federal Deposit Insurance Corporation to provide a broad range of guarantees of the liabilities of FDIC insured depository institutions including their associated holding companies. The guarantee covers all newly issued unsecured senior debt including commercial paper and inter-bank funding and it was also cover all funds held in non-interest bearing transactions accounts such as payroll accounts. This broad guarantee will be effective immediately and fees for coverage will be waived for thirty days. After the thirty day grace period banks may continue to participate in the guarantee program by paying reasonable fees.

I would like to stress once again that the taxpayer's interests were very much in our minds and those of the Congress when these programs were designed. The costs of the FDIC guarantee are expected to be covered by fees and assessments on the banking system not the taxpayer. In the case of the TARP program the funds that are allocated are not simple expenditures, but rather acquisitions of assets in equity positions which the Treasury will be able to sell or redeem down the road. Indeed it is possible that taxpayers could turn a profit from this program although

given the great uncertainties now assurances can be provided. Moreover the program is subject to extensive oversight and controls by a number of bodies.

The larger point though is that the economic benefit of these programs to taxpayers will not be determined primarily by the financial return to the TARP funds, but rather by the impact of the program on financial markets and the economy. If the TARP, together with other measures that have been taken, is successful in promoting financial stability and consequently in supporting stronger economic growth and job creation, it will have proved itself to be a very good investment indeed for everyone's benefit.

Stabilization of the financial markets is a critical first step, but even if they stabilize as we hope they will broader economic recovery will not happen right away. Economic activity had been decelerating even before the recent intensification of the crisis. The housing market continues to be a primary source of weakness in the real economy as well as in the financial markets. And we have seen marked slow downs in consumer spending, business investment and the labor market. Credit markets will take some time to unfreeze, and with the economies of our trading partners slowing our export sales, which had been a source of strengths, very probably will slow as well. These restraining influences on economic activity, however, will be offset somewhat by the favorable effects of lower prices for oil and other commodities on household purchasing power. Ultimately the trajectory of economic activity beyond the next few quarters will depend greatly on the extent to which financial and credit markets return to more normal functioning. Inflation has been elevated recently reflecting the steep increases in the prices of oil, other commodities and imports that occurred earlier this year as well as some pass through by firms of

their higher costs of production. However, expected inflation as measured by consumer surveys and inflation index treasury securities has held steady or eased and prices of imports now appear to be decelerating. These developments, together with the recent declines in the prices of oil and other commodities, as well as the likelihood that economic activity will fall short of potential for a time should lead to rates of inflation more consistent with price stability.

This past weekend the Finance Ministers and Central Bank Governors of the Group of Seven industrialized countries met in Washington. We committed to work together to stabilize financial markets and to restore the flow of credit to support global economic growth. We agreed to use all available tools to prevent failures that pose systemic risk. We affirmed that we will insure our deposit insurance programs instill confidence in the safety of our savings. We agreed to insure that our banks and other major financial intermediaries as needed can raise capital from public as well as private sources. We further agreed that we will take all necessary steps to unfreeze inter-bank and money markets and that we will act to restart the secondary markets for mortgages and other securitized assets. Finally, we recognized that we should take these actions in ways that protect taxpayers and avoid potentially having damaging effects on other countries.

I believe that these are the right principles for action and I see the steps announced by our government yesterday as being fully consistent with them. I've laid out for you today an extraordinary series of actions taken by our government here and around the globe. Americans can be confident that every resource is being brought to bear to address the current crisis; historical understanding, technical expertise, economic analysis, financial insight and political

leadership. I'm not suggesting that the way forward will be easy, but I strongly believe that we now have the tools we need to respond with the necessary force to meet these challenges. Although much work remains and more difficulties surely lie ahead, I remain confident that the American economy, with its great intrinsic vitality, and aided by the measures now available, will emerge from this period with renewed vigor. Thank you very much.

GLENN HUBBARD: Thank you very much, Mr. Chairman, for those remarks. As is the clubs tradition we'll have questions for the Chairman from two club members. The first question will come from Martin Feldstein who is George F. Baker Professor of Economics at Harvard, former Chairman of the Council of Economic Advisors. Henry Kaufman will also be asking questions of the Chairman, President of Henry Kaufman & Company and Treasurer of this organization. Marty the first question is from you.

MARTIN FELDSTEIN: Thanks very much. Ben, I know that before you came to the Federal Reserve you were a student of the experience of the depression years, so I want to ask you two questions related to that and our current experience. Do you think that the current very severe downturn can be solved without a major fiscal initiative? And second, in the new Treasury plan announced, if the new Treasury plan that was announced earlier this week had been tried in the 1930's might it have brought the depression to an earlier end?

BEN BERNANKE: Well I have worked a great deal in the Great Depression and learned a great deal from those studies. My assessment of the thirties was that there were two primary forces that caused the depression and whose correction led to recovery. Those were, first of all,

inappropriate monetary policy. The monetary policy of the thirties led to a deflation of about ten percent a year, so it was extraordinarily tight monetary policy, which created among other things the greatly increased value of debts, which therefore, led to more defaults and bankruptcies. The second element of the depression that was critical was the collapse of our financial system.

Again, that the government allowed to happen, that went on for three and a half years without any significant action. The banks failed, the stock market crashed, other credit markets stopped functioning, foreign exchange markets stopped functioning and the collapse of the financial system, together with the deflation and monetary policy, was the basic reason why the depression was as severe as it was.

Franklin Roosevelt did two things when he became President that I think were the most important things that helped bring the economy back. First of all, he relieved the pressure that the U.S. faced from the constraints of the gold standard which allowed monetary policy to reflate and prices began to rise and began to normalize the price level and to return back towards the levels that had been sustained earlier in the thirties. Secondly, he declared a bank holiday and during that period banks were evaluated and were only opened, at least this was the official line, when they were shown to be sound. But in any case, whether they were sound or not, the subsequent experience followed by the 1934 introduction of deposit insurance stabilized the banking system and brought back the credit system.

So in reference to the current example, which I emphasize is not remotely like the experience of the thirties, we didn't make either of those mistakes. First of all, monetary policy has been proactive and aggressive. We moved quickly, early to try to stabilize the system and to offset the

pressures being created by the credit markets. And secondly, we didn't wait for three and a half years as the financial market collapsed to take action and strong action to stabilize the financial system. And as I discussed in my remarks the actions they've taken this week, together with all the efforts that have been ongoing with the provision of liquidity and other things over the last year are powerful steps to try to stabilize the financial system. So I think we've avoided both of those critical errors that accounted for the 1930's.

On fiscal policy, I'm sure I'll have the chance to talk about contemporary fiscal policy later on, but just in the case of the thirties, I think contemporary scholarship argues that, at least in the case of the United States, that fiscal policy was not the critical element in recovery unless you count World War II, which obviously mobilized the entire economy. Again, I would have focused on monetary policy or monetary stability and financial stability as being the critical elements that brought the economy back in the thirties.

HENRY KAUFMAN: Mr. Chairman, what are the lessons of the last few years from the economy and from the financial markets for the conduct of monetary policy?

BEN BERNANKE: Well I think we're going to be learning and thinking about those lessons for some time. The Federal Reserve, of course, has a dual mandate to promote price stability and maximum sustainable growth and employment. That mandate is an appropriate mandate and one we'll continue to follow. The basic structure in which we will address that mandate is one in which the Federal Reserve responds to economic shocks as they occur within the context of maintaining price stability and well anchored inflation expectations in the intermediate term.

That basic structure, which is now shared essentially by all central banks in the world, I think will survive this experience and will continue to serve us well in the future.

There are some lessons I think that I could think of here of the recent experience. One related to what I just said to Marty. I do think that early intervention, preemptive intervention, moving quickly was important. We did so, we moved early this year. At the time there was a lot of concern and skepticism that our actions might lead us into a stagflation or an inflation. I think moreover that there was also skepticism, that the situation was all that serious. I think the evidence is now in that the inflation problems are moderating and we look to be returning to price stability at a reasonable pace. At the same time our guess that there was a significant tail risk, that there was a significant downside risk, from the financial stresses on the economy, which is I think one of the main lessons I learned from my own research and study, which is that the financial system really does matter for the economy. I think that has confirmed our strategy.

A second lesson I would take though is that monetary policy also has its limits. The Federal Reserve, as you know, acted very aggressively, both on the side of monetary policy and on the side of providing liquidity, and using all the tools we have to try to maintain stability and support economic growth. We reached a point though where the situation required additional firepower. And at that point we, the Administration with the Federal Reserve's support, went to the Congress to ask for financial fiscal resources to address the problem in a way it had to be addressed. So I think that's the second lesson that monetary policy ultimately cannot always solve the problems and that sometimes you do need some fiscal or financial intervention and we're getting that currently.

A third lesson I would mention, again, thinking through the recent experience, you know last week we had a coordinated rate cut with five other central banks. A coordinated rate cut is extremely unusual, but it couldn't have happened if we hadn't had ongoing coordination, discussions, consultation with all the other major central banks in the world. I understand that President Trichet spoke here yesterday. I got a call from him on the way in this morning. We have continual conversations, discussions and we work very closely together as well as will Mervyn King and the Bank of England, Masaaki Shirakawa, the Bank of Japan, and that close international cooperation, which we're now seeing also in the sphere of the financial rescue, I think is very important.

Henry, I think implicit in your question is probably the very vexed question of asset bubbles and what to do about those. Obviously, the last decade has shown that bursting bubbles can be an extraordinarily dangerous and costly phenomenon for the economy and there is no doubt that as we emerge from the current crisis that we are all going to look very hard at that issue and what can be done about it. I don't think that I have the time or that this is the right place to try and go through all the nuances and the difficult questions that that raises. I'll just make one point here, which is I think that one of the key issues that's going to be debated as we look at the problem of bubbles in future, is what should be the leading approach? Should it be monetary policy or should it be supervisory and regulatory policy? I do believe that the later does have a significant role to play in constraining excessive leverage, excessive risk taking and the other elements that lead to bubbles. And I believe that one of the elements of our reform as we go forward and look at the financial system as a whole will be to think about a more macro oriented or more macro

prudential regulatory system that takes into account the broader issues of financial stability as well as the issues related to the safety and soundness of individual institutions.

MARTIN FELDSTEIN: I think we now recognize that a principal cause of the current financial problem was the bursting of the bubble of house prices. Experts say that house prices still have another ten to fifteen percent to fall to get back to the pre-bubble conditions. I think there's a danger of a downward spiral of house prices beyond that though, not stopping at just ten or fifteen percent further, that would be generated by defaults of homeowners with negative equity defaulting, leading to foreclosures and increasing the supply of homes. So that brings me to this question. Do you think that this financial crisis can be stopped without preventing the downward spiral in house prices?

BEN BERNANKE: Well Marty, I recognize some of your own thoughts and policy suggestions in that question.

MARTIN FELDSTEIN: If not here, where?

BEN BERNANKE: And I'm very sympathetic to your perspective. I think as I said earlier in my remarks the housing bubble, or the burst of the bubble, was the triggering event of the crisis. It's played a central role both in the decline in the real economy as wealth has been affected, as construction has been affected, but also in the financial sector as mortgage assets, residential mortgages, have been at the center. I should say not the only type of assets that's been

problematic, but certainly one of the central and largest classes of assets that have been a problem.

So what we have seen is what we use in long speak, is called the adverse feedback loop. The phenomenon, whereby declining house prices weaken the economy, lead to higher delinquencies and defaults. That feeds into the financial system, which then becomes weakened because of losses, which then becomes less willing to extend credit, which causes the economy to weaken and you get this very adverse vicious circle. And so I think I would agree with you that the key to the solution here is to break that cycle, and I think housing is an important place to work, but I think that also it can be broken at different points.

On housing, let me address that. I think there have been a number of aggressive steps to address the housing issue. First, the stabilization of Fannie and Freddie, which I mentioned before, together with their increased purchases of mortgage backed securities, increased purchases of mortgage backed securities by the Treasury is supporting the mortgage market, and at least that portion of the mortgage market, I believe that, particularly as the current crisis dies down, will be there to support home ownership and construction and residential development.

Secondly, your concern about foreclosures is absolutely on the mark. That has been part of this adverse dynamic. People who are more prone to default, when they are either, of course, unemployed or if their house value is declining, have been creating losses for banks, which in turn creates, again, this cyclical adverse dynamic. There have been a number of steps to try to address foreclosures, and those include work with servicers where the Federal Reserve has

supported the Treasury's work and the so called Hope Now initiative. The Federal Reserve has done its own work also on a voluntary basis working with servicers and communities around the country trying to address foreclosures.

The Congress recently passed the Hope for Homeowners Bill, which creates a three hundred billion dollar fund to help homeowners refinance their mortgages after a principal write down into the FHA. The Federal Reserve is on the Board of that, and we are involved in that as well. There are other steps as well, but I think strengthening the economy in general and strengthening the financial system in general helps to break that feedback loop. And so I think that, for example, the capitalization of the banks to restore credit to the economy and strengthen it will also feedback onto people's ability and willingness to buy homes and into the prices of homes. So that cycle can be broken at a number of different areas.

I want to be very clear, I am sympathetic to policies that attempt to address the problem at the level of housing. A number of things have been tried. The difficulty is that the U.S. housing market is enormous and affecting it directly is difficult. It's very difficult. We should continue to work in that direction though and suggestions made by Marty and others I think deserve serious attention as we try to create a floor, or at least some stabilization, going forward in prices, which will be a critical element I think of the stabilization of the financial system and then the recovery of the economy.

HENRY KAUFMAN: Mr. Chairman, financial concentration has increased significantly in the last few decades and certainly has accelerated in this current crisis. How should monetary

policy and policy in general deal with the risk that this financial concentration poses to the effective functioning of financial markets?

BEN BERNANKE: So there has been, not just recently, but for a number of years, a great deal of consolidation, for example, in the banking system and greater concentration, greater size in financial institutions. We continue to have in this country thousands of smaller institutions, community banks and regional banks. So we have a very diverse credit system including banks, non-banks and other markets. And I think that's very important to maintain. I don't want to see this country go to the point where we have six large banks and that's basically the credit market. We need to have that diversity, we need to have the information capital, the local knowledge that is incorporated in local lending, local community banking and diversity of different types of credit institutions. So that's an important policy consideration in the long run.

Excessive market concentration is also a concern. There are two ways to look at it. You can look at the share of markets that the large institutions have, and some of them are now becoming very, very big in the overall markets. On the other hand, as the Federal Reserve evaluates mergers and acquisitions we also look at local markets because it's in the local city or the local county where the competition for deposits and for credit goes on. And there what we found is that because these banks are nationally diversified that we can still maintain, generally speaking, in most local communities, good competition among credit providers.

But to get to the heart of your question once again, Henry, I think the real concern that we have is that we have got and developed in this country a very serious too big to fail problem, and that

problem we've just recognized now in the current situation how severe it is. There are too many firms that are, in some sense, systemically critical, and that creates problems both for the system itself, because if one fails it creates tremendous problems, but it also creates distortions in that market discipline will break down if everyone believes that firm X is not going to be allowed to fail, therefore, why should we monitor this firm, why should we care about what they do with the money we lend them because we know we're going to get it back? So that too big to fail problem is a very serious problem and I do believe that it's going to be an important thing to address as we go forward.

In some speeches I had given earlier this summer, one at the FDIC, I've talked about some ways to address this. Let me just mention a few possibilities. One is clearly to the extent that you have firms where market discipline is weakened. That needs to be compensated for by strong regulatory and supervisory oversight. We need to make sure that the large firms, if they do seem to have that too big to fail status, are not taking advantage of it to take excessive risk, excessive leverage.

A second way to address the problem is to strengthen the financial infrastructure. We've seen, for example, that some of the firms that have been critical to the system and which have proved systemic risks had, for example, provided large amounts of credit insurance to banks and other institutions using credit default swaps and other vehicles. Now credit default swaps are not traded on an exchange. They're not traded through a central counter party, which means that if one of these firms failed among the consequences would be that the banks and others who had purchased credit insurance would be forced to write down tens of billions of dollars of value

because of the loss of the counter party, which would no longer be able to make good on their credit guarantees. So we need to strengthen the infrastructure. We need to work as Tim Geithner here at the New York Fed is doing to create central counter parties, exchanges, other mechanisms to reduce the instability that arises when the failure of one large counter party permeates the entire system through over the counter derivatives, CDS and other types of instruments. That's a very important thing as well.

A third element, which I also think is very important, is we need a way to resolve large failing institutions in a safe and sound manner if you will. In the case of banks, we have a system, it's called FDICIA. It's a law passed in 1991, which was recently applied in the Wachovia, case whereby there is a set of rules and expectations that can be met by the FDIC in resolving any bank and doing it in a way that generally speaking will be at least cost to the depositors. However, there are provisions in that law which say that if there is a systemic risk problem associated with the failure of an institution than there is an exception made and the FDIC can use extraordinary powers, if necessary, to protect and guarantee the creditors of that institution and avoid the systemic implications that might arise if that institution was simply allowed to fail.

Outside the banking system in Bear Stearns and in AIG and Lehman and all the other things we've dealt with there is no such system. There is no resolution system. There's no set of rules, there's no funding, there's no authorizations. So everything that was done with those non-bank firms had to be done in a very ad hoc way. As I say for the time being now the funding of the TARP will provide an important back stop to allow us to address these things in a more orderly situation, which I hope will not occur, in the future, but I think in the longer term we need

something analogous to the FDICIA Law for banks for broader financial institutions to make them less systemically critical.

So if we take these steps; if we have oversight, if we strengthen the system so that it's less prone to be damaged by the failure of one firm and if we develop a resolution regime I think we will at least get our hands around the too big to fail problem, which again, I believe is a very serious problem today in our financial system.

MARTIN FELDSTEIN: Ben, many market participants I talk with think that the way that Lehman was allowed to fail caused substantial damage to confidence and to the access to credit of other financial institutions. Do you think that criticism has some merit, and if so, how might it have been done differently? And could it be done differently if there were a similar situation under the TARP?

BEN BERNANKE: So Lehman was not allowed to fail in the sense that in the sense there was some choice being made. There was no mechanism, there was no option, there was no set of rules, and there was no funding to allow us to address that situation. The Federal Reserve's ability to lend, which was used in the Bear Stearns case, for example, requires that adequate collateral be posted so that we are not taking credit risk we are lending against collateral. In this case that was impossible, there simply wasn't enough collateral to support the lending.

From the Treasury's perspective, unlike the FDIC or deposit insurance fund, there were no funds, there was no option. We worked very hard over one of those famous weekends with not

only some potential acquirers of Lehman, but also we called together many of the leading CEOs of the private sector in New York to try to come to a solution. We didn't find one, and therefore, we were unable to do what we wanted very much to do, which was to prevent the failure of the company.

Part of the problem was, I think though, is that Lehman was not just a cause it was also a symptom. Because throughout this period we have seen one large company after another, and I can list them all for you, but I think you all know five six, seven, eight companies, that have come under increasing pressure with the pattern that as the weakest falls or is taken care then the pressure just goes to the next one. And there was a lot of concern among the CEOs at the meetings over the weekend there that, okay, even if we all pool lots of money and somehow or another patch this together and keep Lehman afloat, well there's another company right down the list that's going to be next.

So it was clear at that point to me that this was simply beyond the capacity of our existing authorities and that it was necessary for us to go to Congress and say the only way to fix this is through a systemic comprehensive approach. We can no longer deal with the situation in an ad hoc manner. And so we went to Congress, we received the authorization, the seven hundred billion dollar authorization, which comes, by the way, with quite a bit of flexibility in the way it can be used, and that has already I think preemptively, as the money, the capital that's gone into banks, even the banks that didn't receive capital, we've seen already their credit default swaps spreads come down, the default risk come down. I think that's the approach that's going to

stabilize the financial system and I'm very glad that Congress was able to give us this so that we can address it.

If another situation like that arises, the Lehman type situation, I think the TARP would in fact, because of the fiscal resources there, would in fact provide some additional options which would be very valuable. And we recognize, notwithstanding the too big to fail problem which I discussed before, that systemic risk is a very serious matter. We've never felt otherwise. We've never been deluded into thinking that allowing systemically critical firms to fail was in any way going to be anything other than a very serious problem. I do believe we now have some better tools to address it. In the longer term, once again, we need to have resolution authorities that will allow us, in a systematic and congressionally approved manner, to address the resolution of large non-bank systemically critical firms.

HENRY KAUFMAN: Mr. Chairman, now that we have TARP, and with its proposed reverse auction designed to create price discovery, don't you think that this process will not lead to a significant lifting of mortgages out of private institutions considering the complexity of the problem, and therefore, the volume that will be put aside is going to be relatively small?

BEN BERNANKE: Well one of the key issues in this crisis, I was saying earlier there are a lot of similarities and general themes between this crisis and earlier ones, but this crisis also has a number of unique characteristics. And one that I mentioned in my remarks is the opacity and complexity of the financial instruments that many banks and other institutions hold. It's a problem that those assets do not trade. There is no liquidity, there is no price discovery. Nobody

knows what they're worth. They're marked down based on distressed sale prices. That in turn causes markdowns in capital. So part of the solution, if we can do it, would be to try to restore some liquidity and price discovery to these markets. And that was one of the objectives of the TARP. To create a set of mechanisms that would create market based price discovery by buying assets from institutions.

Now you're absolutely right, for example, the amount of mortgage credit outstanding if you include both residential and commercial is on the order of fourteen trillion dollars. So seven hundred billion is only five percent of that. So it's obvious that, and now we've committed some of the money to the capital injection, so it's obvious that the TARP funding will not be sufficient by itself to take all the questionable credit or the hard to value assets off of bank balance sheets. That's not really the goal. The goal of that part of the program is to create some liquidity in the market, to create some price discovery. If that happens then we would hope to see some trading begin and see some of these situations resolved through the private sector. So it's meant to be a stimulus, not a complete solution.

Now as I've described we are involved now in the capital injection program. One of the great virtues of the TARP is that it is flexible and can be used in different ways as required. And so we will be thinking going forward, and I should say when I say we I mention myself only in the context of being a member of the oversight board, the Treasury, of course, is the lead while the Federal Reserve is providing as much technical assistance as possible, that going forward we will have to adapt to developments in the financial system and try to use this money in a way that will

give us the biggest bang for the buck and will help restore the economy and the financial system as quickly as possible. Thank you.

GLENN HUBBARD:       Thank you very much, Mr. Chairman, for those remarks. Thank you Marty and Henry as well. This podium is always here for you whenever you want it. The lunch will now be served, thank you.

(END)